

FIG. 1

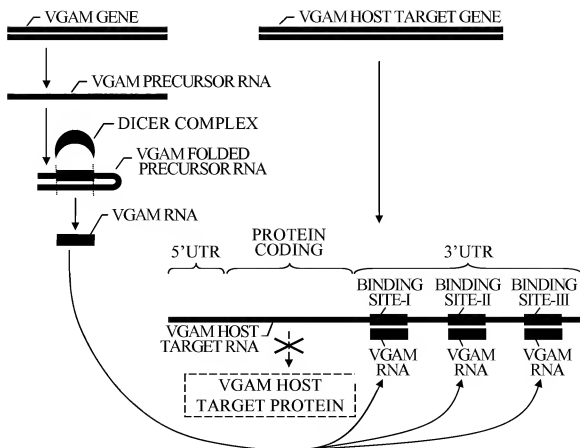


FIG. 2

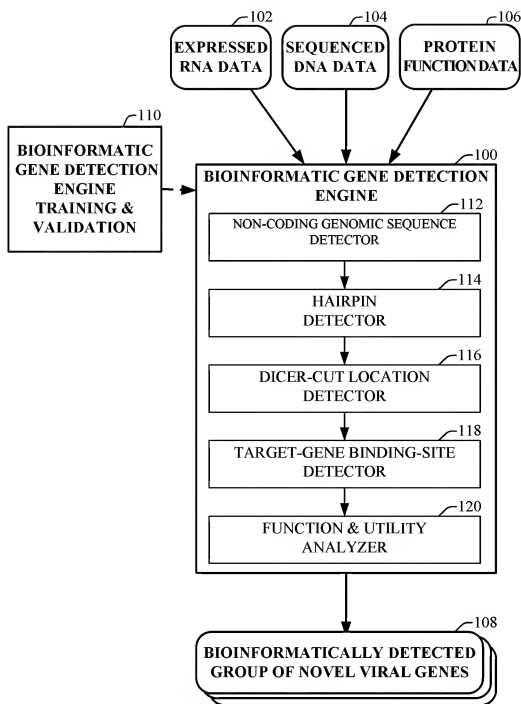


FIG. 3

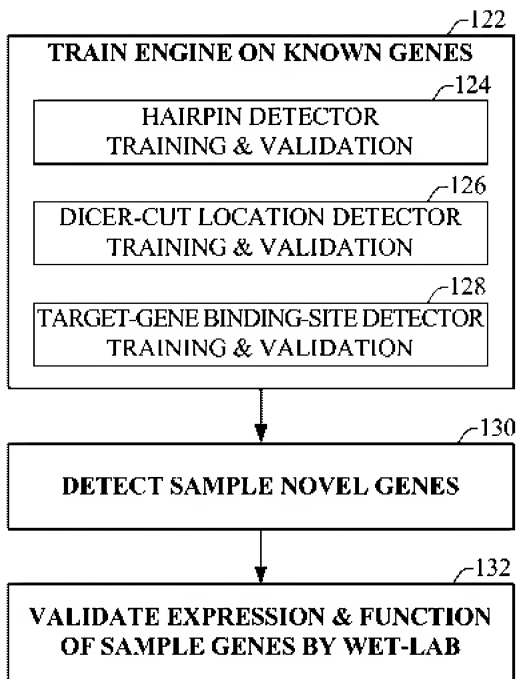


FIG. 4A

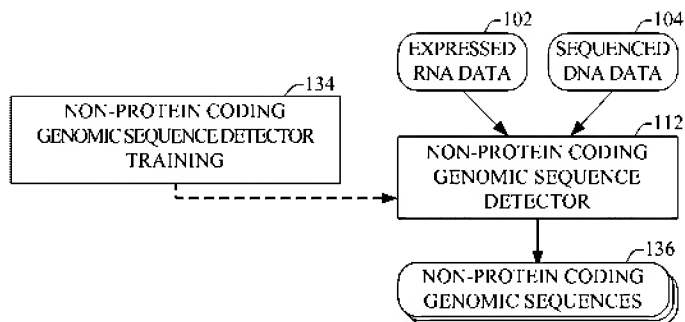


FIG. 4B

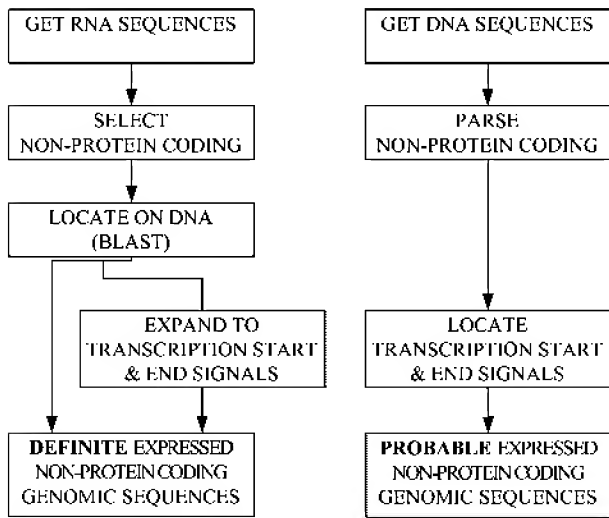


FIG. 5A

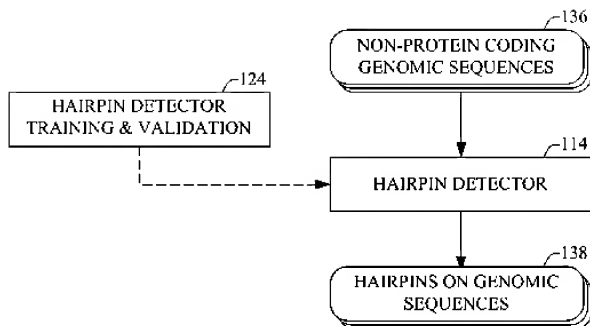


FIG. 5B

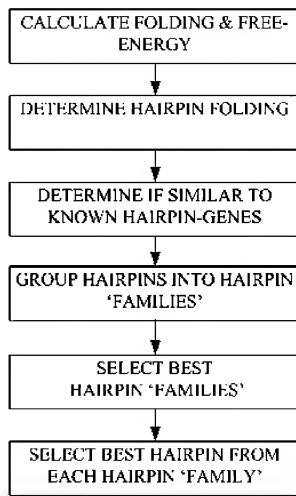


FIG. 6A

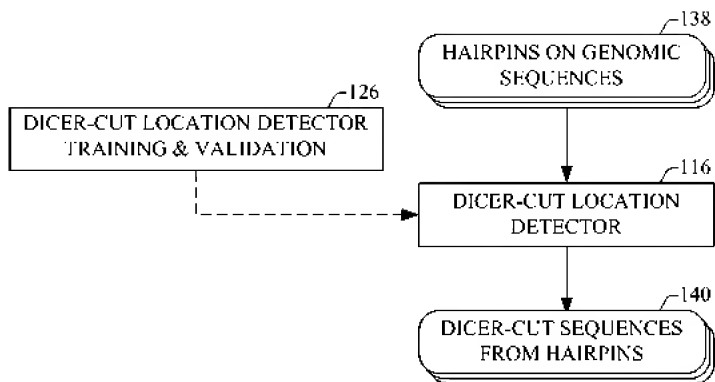


FIG. 6B

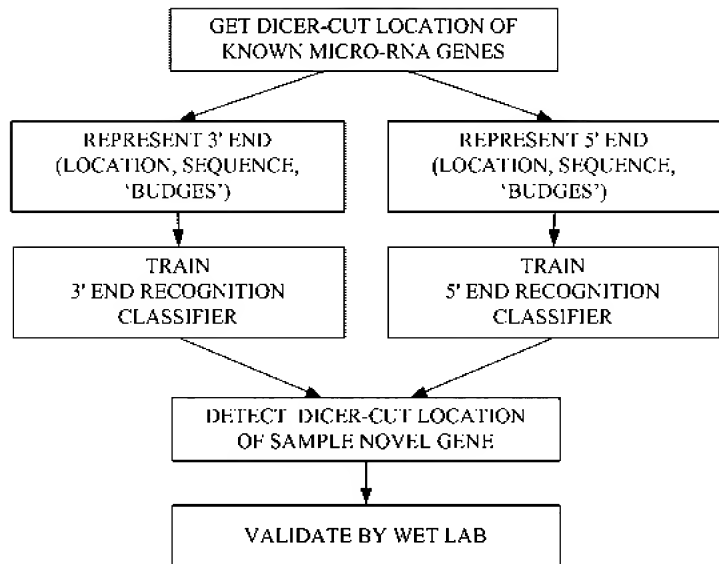


FIG. 6C

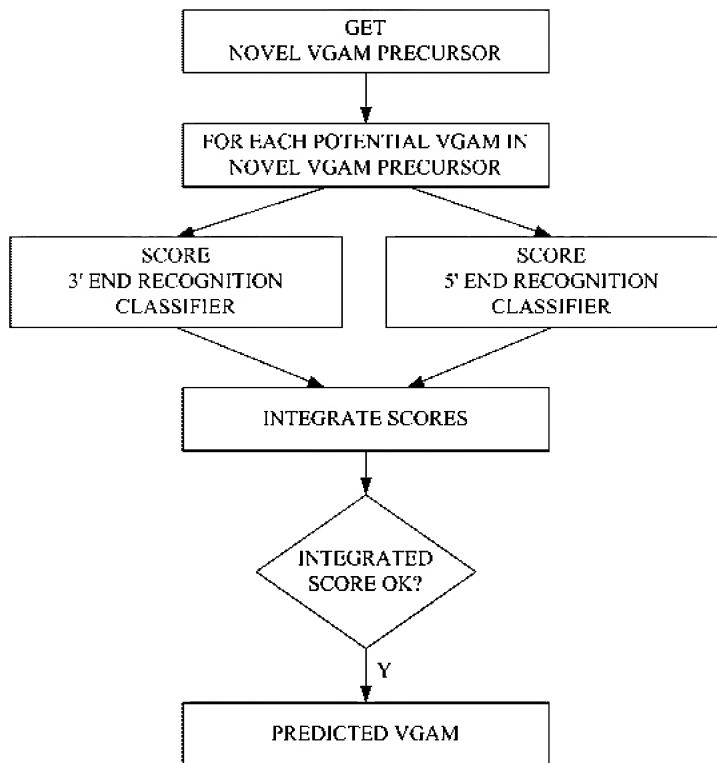


FIG. 7A

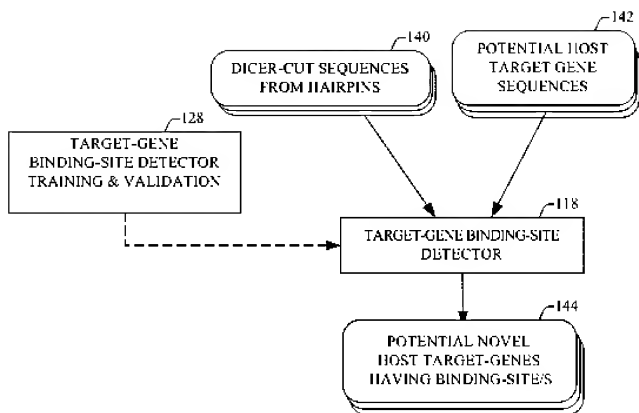


FIG. 7B

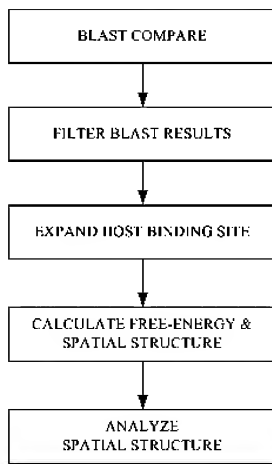
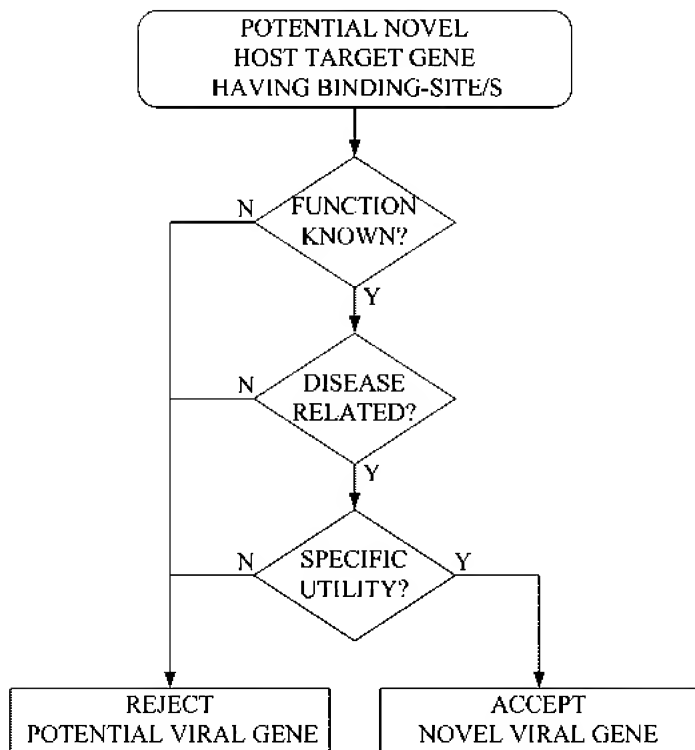


FIG. 8



The diagram illustrates the proposed mechanism of VGAM RNA action. It begins with the **VGR GENE**, which is transcribed into **VGR PRECURSOR RNA**. This precursor is then processed into **VGR FOLDED PRECURSOR RNA**. These precursors are further processed into **VGAM1 FOLDED PRECURSOR**, **VGAM2 FOLDED PRECURSOR**, and **VGAM3 FOLDED PRECURSOR**. These precursors are then processed into **VGAM1 RNA**, **VGAM2 RNA**, and **VGAM3 RNA**. VGAM3 RNA binds to VGAM3-HOST TARGET RNA at a **BINDING SITE**, forming a **VGAM3-HOST TARGET PROTEIN** complex. Similarly, VGAM2 RNA binds to VGAM2-HOST TARGET RNA at a **BINDING SITE**, forming a **VGAM2-HOST TARGET PROTEIN** complex. VGAM1 RNA binds to VGAM1-HOST TARGET RNA at a **BINDING SITE**, forming a **VGAM1-HOST TARGET PROTEIN** complex.

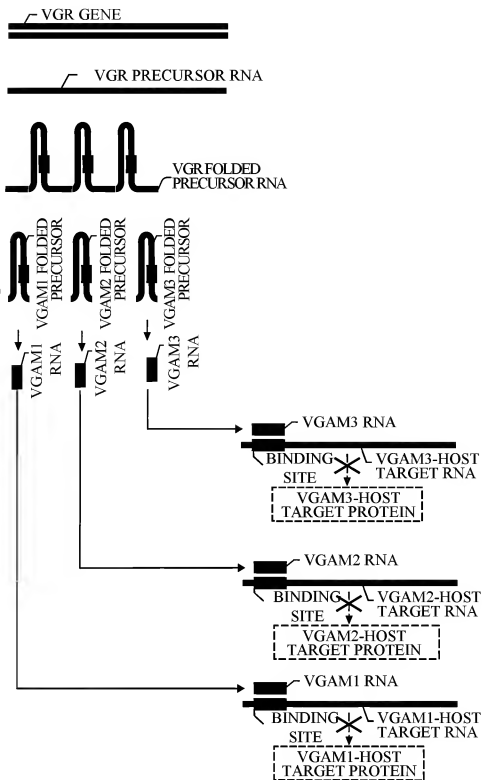


FIG. 10

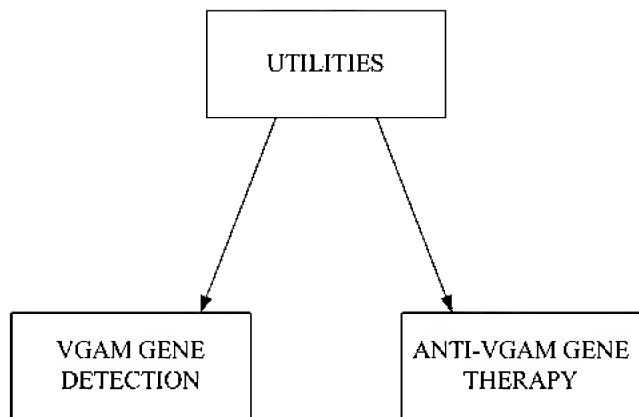


FIG. 11A

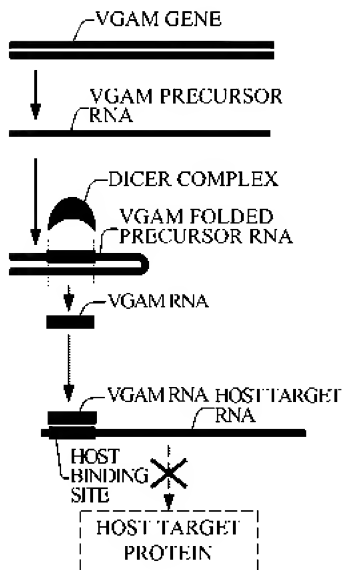
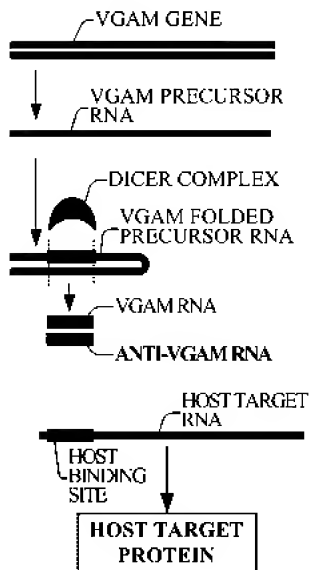


FIG. 11B



EST72223 sequence:

FIG. 12A

CCCTTATTAGAGGATTCTGCTCATGCCAGGGTGAGGTAGTAAGTTGT
 ATTGTTCTGGGGTAGGGATATTAGGCCCAATTAGAACATAACTAT
 ACAACTTACTACTTTCCCTGGTGTGTGGCATATTCACACTTAGTCTTA
 GCACTGTTGCCTCCATCAGACAAAAGTTGTAGATGTTCCCTGGATAATT
 TGGACTGGAGAAAGAGACATGGAAGGGGACAGATGGTGTTTAGG
 GTGAGGCAGATGTCATTATAAAGTGAATTTGCTTTTCAATTGGAGC
 ATATAATTATTTACCTTTGGCATGAACCTATTTGCTATTCTTCAAC
 TGTGTAATGATTGCATTTTATAGTAATAGAACAAGGATGTGTGCAAG
 GGAATGGAAGCATACTTTAAGAATTTTGGGCCAGCGCGGTGGTTC
 ATGCCTGTAATCCAGCATTTTTTGGGAGGCCGAGGCCGGGTGGATCA
 CCTGAGGTCAGGAGTTCGAGACCAACCTGGCCAACACGGCGAAACC
 CCGCCTCTACTCAAATACAAAATTAGCCAGGCTTGGTGACACTCGC
 CTGTGGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTGCTTGA
 ACCCAGGAAGTGGAGGCTTCAGTGAAGCTGAGAACACGCCACTGCA
 CTCCAGTCTCTGGGCAACAGAGCAAGACTCTGTCTCAGGAAAAAAA
 AG

MIR95

GAM24

FIG. 12B

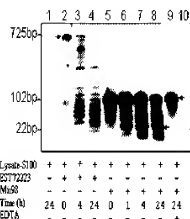
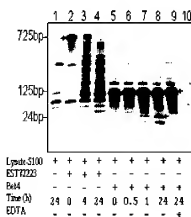


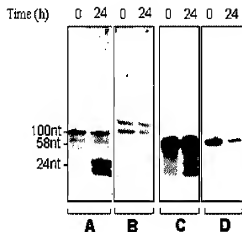
FIG. 12C



MIR95

GAM24

FIG. 12D



dbEST Id. 7929020 (Image4514344) sequence:

SCAAAACTSGAAGCATTCCCTTTGAAAAGTGGCACAAGACAGGSGATGCCCTCT
 CTCACCGCTCCCTATTCAACATAGCTTTGGAAGTTCTGCCCACGCCAATTAGGCA
 GGAGAAGGAATAAAGGGTATTCAATTAGGAAAAGAGCAAGTCAAATTGTTCCCT
 TTTTSCAGATGACATGATTGTTATCTAGAAAAACCCATTSTCTCAGSCCCAAA
 TCTCCTTAAGCTGATAAGCAACTTCAGCAAAAGTCTCAGGATACAAAAATAAATGT
 ACAAAAATCACAGCATTCTTACACACCAACACAGAAAAACAGAGCCAAATCA
 TSASTMACTCCCATTCACATTGCTTCAAGAGATATAAATACCTAGSNAATCC
 AACTTACAAGCGATCTGAAGACCTCTTCAAGGAGAACTACAAAGCACTGCTCA
 AGSAAATAAAGAGGATACAAACAAATGGAAGAACATTCCATGCTCATGSGTAG
 GAAGATCAATATTGTAAGATGSCCATACTGCCAAGGTAATTTACAGATTCA
 ATGCCATCCCCATCAAGCTACCAATGACTTTCTTACAGAAATTCGAAAAAACTA
 CTTTAAAGTTCATATGGAACCAAAAAAGAGCCCGCATCGCCAAAGTCAATCCTAA
GCCAAAGAACAAAGCTGGAGGCATCACACTACCTGACTTCAAACTTTACTACA GAM23
AGGCTACAGTAACCAAAACAGCATGGTACTCGTACCAAAACAGAGATATAGATC
 AATGGAACAGSACAGAGCCCTCAGAAATAACGCCGAATACCTACAACTATCTGA
 TCTTTSACAAACCTGTAAGAAACAGCAATGSGGNAAGGATTCCTATTTTAATA
 AATCGTCTGCGAAAGTCACTAGCCATATGTAGAAAGCTGAAAGCTGGATCCCT
 TCCTTACACCTTATACAAAAATCAATTCAAGATGAGATTAAAGATTTAAACSTTA
 GACCTAAAACCATAAAACCTTAGAAGAAAACCTAGGCATTACCATTCAGAGACA
 TAGGCATGCGCAAGCACTTCATGTCCAAAACACCAAAAGCAATGCCAACAAAAG
 ACAAAATGACAAATGSGATCTAATTAAACTAAAGAGCTCTGCACAGCAAAAG
AACTACCATCAGAGTGAACAGGCAACCTACAAAATGGGAGAAAATTTTCGCAA
CCTACTCATCTGACAAAGGGCTAATATCCAGAATCTACAACTCAAAACAAA GAM2
 TTTACAAAAA

FIG. 13B

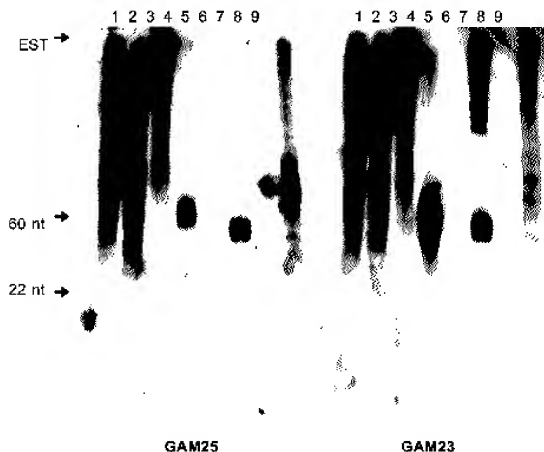
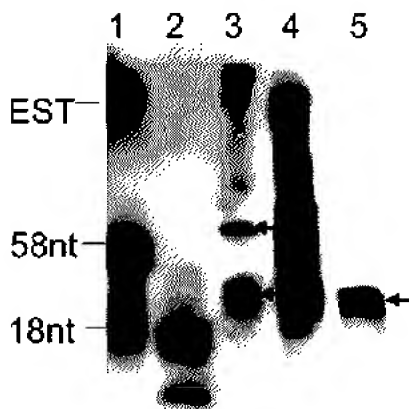


FIG. 13C



GAM25

ACTCCTATCAACAGTGTAAAAGCATTCTCTGTTTCTCCATAATCTTGCCAGCATCTT
 TTCATTTTTTTTGAATTATAGCCATTCTGACTCTTCTGAGATGCTCTCTCATTTCTGG
 TTTTGATTGCAATTTCTCAGATGATCAGTGATGTTGAAGTTTTTTGTTTGTGGC
 TGCATGTATGCCCTCTTTTGAAGAAGTGTCTGTTTGTGTCTCTTGACCACCTTTCTAA
 TGCCGCTTGACTTTTTTTTTTCTTCTGATAAATTTCTTTAAGTTCTCTTCTAGATCTCGGAT
 ATTAGACCTTTTGTGAGATGGATAGAGTGC AAAAATTTTCTCCCATTTCTGTAGGTTG
 TCGGTTTTACTCTGTTGATAGGTTCTTAATGCTGTGCAGAGAAGCTCTTTAGTTTAATT
 AGATCCCATTCTCAATTTTGGCCTTTTCTTCCAAATTCCTTTTGGCATCTTCGTCAT
 GAAATCTTTGGCCTTTGCCGTGTGTCTGAAATGGCATTGCCATAGGTTTTCTTCCAGGA
 TTTTATATAGTTTTTGGGTTGTAGATTTAAGTCTTTAATCCATCTTTGAGTTAACTTTT
 CTATATCGCTTAAGCAACGGGGCCCCCTTCAATTTGCTGCCAAATGGCTAGCCAGTTC
 TCCCAGCACCATTTATTAATAAGGGAATCTTTTCCCCATTTGCTTCTCTTTTGTGAGG
 TTTGTCAAAGATCACATGTTGTAGGTGTGTGTTCTTATTCTGGGTTCTCTATTCT
 TCTTCCATTGGGCTATGGCCCGGTTCTCTACCAACCACTATGCTCTTTTGGCTACCA
 TAGTCTTTGTAGAATGTTTGAAGCTGGGTAGCATGATGCCCTCTAGCTTTTGTCTTTCT
 TGCTAAGAAATGTCTTGGCTATTGGGCTCTTTTGGTCCATATGAATTTTAAA
 ATAGCTTTTTCTAGCTCTCTTAAAGAACTGTAATAGTAGTTTAATGGGCTTAGCATT
 TAATTTACAGATTGCCTTGGGCAAGTGTGGTCAATTTTCAAGATATTGATCCCTTCTG
 TCTGTGAGCATATGTTTTTCCATTTGTTGTGTCATCTCTGATTTCTTTGAATAAT
GGTTTATAGTTATCCTTTGAAAAGGTCCTTCACCTTTTCTTGTGTTAGCTGTATTCCCTAG
ATATTATACTCTTCTTGTGGCAATTGTGAATGGGAGTTAATTCATGAGTTTTCTCT
 CGGCTTGCTGTGTTGTTGGTGTATAGGAATGCTAGTGACTTTTGACATTTGATTTTG
 TATCCTGACACTTTCTTGAAGTTGCTTATCAGCTAAGAAGTTTTTACGCTGAGATG
 ATGGAGTTTTCTAGATATAGGATCATATCATCTGCAACAAAGATAGTTTGACTTC
 CTGTCTTCTCTATTGGAATAGCTTTTCTTTCTTCTCTTGGCTGATTTGCCTTGGTGA
 GAATTTCTAATACCTCTTGAATACGACTGCTGACCTCGTCCCAA

GAM
26

FIG. 14B

1 2 3 4 5 6 7



← EST

← 130 nt

← 22 nt

GAM26